

**CLAIMS:**

1. A method comprising:  
receiving configuration input having text defining a data channel and one or more data sub-channels within a network link, wherein the text includes references that hierarchically relate the data channel and the data sub-channels; and  
configuring a network device according to the configuration input.
2. The method of claim 1, wherein the references identify text blocks within the configuration input.
3. The method of claim 2, wherein configuring the network devices comprises:  
resolving the references to the text blocks within the configuration input; and  
constructing a hierarchical data structure to store the configuration input based on the resolution of the references.
4. The method of claim 2, wherein the text blocks include a first text block and a second text block, wherein the first text block includes configuration data for the data channel and a reference to a first data sub-channel, and wherein the second text block includes configuration data for the first data sub-channel.
5. The method of claim 1, further comprising displaying a representation of the configuration input to a user.
6. The method of claim 5, wherein displaying a representation comprises justifying the text at or near a common margin within a display.
7. The method of claim 1, wherein the references comprise user-defined names for the data channel and data sub-channels.

8. The method of claim 1, wherein configuring the network device comprises configuring an interface of the network device to channelize input and output data according to the configuration input.
9. The method of claim 1, further comprising routing packets based on the configuration information.
10. The method of claim 1, wherein receiving configuration input comprises receiving configuration input from a user via a local interface.
11. The method of claim 1, wherein receiving configuration input comprises receiving configuration input from a remote user via a network connection.
12. The method of claim 1, wherein the configuration input includes labels for the text of the data sub-channels, and each label comprises the respective reference concatenated with one or more channel identifiers according to the hierarchical relationships of the data channel and the data sub-channels.
13. A computer-readable medium having configuration input therein comprising text defining a data channel and at least one data sub-channel within a network link, wherein the text includes references hierarchically relating the data channel and the sub-channel.
14. The computer-readable medium of claim 13, wherein the references comprise user-defined names for the data channel and the data sub-channel.
15. The computer-readable medium of claim 13, wherein the text includes a first text block and a second text block, wherein the first text block includes configuration data for the data channel and a reference to a first data sub-channel, and wherein the second text block includes configuration data for the first data sub-channel.

16. The computer-readable medium of claim 13, wherein the configuration input includes labels for the text of the data sub-channel, wherein each label comprises the respective reference concatenated with one or more channel identifiers according to the hierarchical relationships of the data channel and the data sub-channel.

17. A network device comprising:

a computer-readable medium to store configuration input having text blocks defining a data channel and at least one data sub-channel, wherein the text blocks include references relating the data channel and the sub-channel; and

a control unit to communicate data over a channelized network link according to the configuration input.

18. The network device of claim 17, further comprising an interface card for coupling to the network link, wherein the control unit configures the interface card according to the configuration input.

19. The network device of claim 17, further comprising a configuration module to receive the configuration input from a user.

20. The network device of claim 17, wherein the configuration module receives the configuration via a local interface.

21. The network device of claim 17, wherein the configuration module receives the configuration information via a network connection.

22. The network device of claim 17, wherein the references comprise user-defined names for the data channel and data sub-channel.

23. The network device of claim 17, wherein the configuration input includes a first channel definition block having configuration data for the data channel and a reference to a

first sub-channel, and a second channel definition block having configuration data for the first data sub-channel.

24. The network device of claim 17, wherein the references hierarchically relate the data channel and the sub-channels.

25. The network device of claim 17, wherein the control unit resolves the references to construct a hierarchical data structure representing channelization of an interface of the network device.

26. The network device of claim 17, wherein the control unit comprises:  
a routing engine to store routing information representing a topology of a network;  
and  
a packet-forwarding engine to store packet-forwarding information in accordance with the routing information.

27. A computer-readable medium having instructions therein for causing a processor within a network device to:  
receive configuration input having text blocks defining a data channel and one or more data sub-channels within a network link, wherein the text blocks include references that hierarchically relate the data channel and the data sub-channels; and  
configure the network device according to the configuration input.

28. The computer-readable medium of claim 27, wherein the references identify respective text blocks within the configuration input.

29. The computer-readable medium of claim 27, further comprising instructions that cause the processor to:  
resolve each reference to text blocks within the configuration input; and  
construct a hierarchical data structure to store the configuration input based on the resolution of the references.

30. The computer-readable medium of claim 27, wherein the text blocks include a first text block and a second text block, wherein the first text block includes configuration data for the data channel and a reference to a first data sub-channel, and wherein the second text block includes configuration data for the first data sub-channel.

31. The computer-readable medium of claim 27, wherein the instructions cause the processor to display the configuration input to the user.

32. The computer-readable medium of claim 31, wherein the instructions cause the processor to justify the text blocks at or near a common margin.

33. The computer-readable medium of claim 27, wherein the references comprise user-defined names for the data channel and data sub-channel.

34. The computer-readable medium of claim 27, wherein the instructions cause the processor to configure an interface of a network device to channelize input and output packets according the configuration input.

35. The computer-readable medium of claim 27, wherein the instructions cause the processor to route data based on the configuration information.

36. The computer-readable medium of claim 27, wherein the instructions cause the processor to receive configuration input from a user via a local interface.

37. The computer-readable medium of claim 27, wherein the instructions cause the processor to receive configuration input from a remote user via a network connection.